Check that cable!

BY BEVERLY ALBRECHT GALLAURESI, RN, BS, MPH

NEIGHBORS FOUND a woman unresponsive, apneic, and pulseless and performed CPR until the Emergency Medical Service (EMS) team arrived. The EMS personnel attached a defibrillator/transcutaneous pacemaker (TCP) to the woman and found that her ventricular rhythm was 20 to 30 beats/minute, still with no pulse. The device continually displayed a "leads off" message. The operator checked all connections but couldn't find a reason for the device failure. The woman died.

The defibrillator/TCP device was sent to the manufacturer for examination. During testing, it gave intermittent "leads off" messages in the pacing mode. Further testing found an open circuit in the cable assembly that prevented power from passing through. The manufacturer replaced the cable, returned the device, and reviewed proper maintenance and testing with the EMS personnel. Here are tips on safely using a defibrillator/TCP:

- Follow manufacturer recommendations and your facility's policy for proper maintenance, cleaning, and storage of the defibrillator/TCP, and cable and for cable replacement.
- Inspect the cable for signs of extreme wear, cuts, abrasions, cracks, exposed inner wires, and broken or bent connectors and pins.
- Check the cable for gel or any foreign substance that could get into the cable connection and cause failure.
- Don't clean any part of the defibrillator/TCP or cables with bleach (even diluted bleach) or phenolic compounds, which could cause device failure. Don't immerse any part of the device or cable in liquid.
- Immediately report suspected damage of any device part according to your facility's policy.
- Keep an extra cable ready as a backup. N

The opinions and statements here are the author's and may not reflect the view of the Department of Health and Human Services.

Beverly Albrecht Gallauresi is a nurse-consultant at the Center for Devices and Radiological Health, Food and Drug Administration, Rockville, Md.